

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

1. **(Original)** A cell in which a genomic gene encoding an enzyme relating to a sugar chain modification in which 1-position of fucose is bound to 6-position of N-acetylglucosamine in the reducing end through α -bond in a complex type N-glycoside-linked sugar chain is knocked out, wherein the cell is naturalized in a serum-free medium.

2. **(Original)** The cell according to claim 1, wherein all of alleles on a genome encoding an enzyme relating to modification of a sugar chain in which 1-position of fucose is bound to 6-position of N-acetylglucosamine in the reducing end through α -bond in a complex type N-glycoside-linked sugar chain are knocked out, and wherein the cell is naturalized in a serum-free medium.

3. **(Currently Amended)** The cell according to claim 1-~~or~~2, wherein an exon region containing an initiation codon of the genomic gene encoding an enzyme relating to modification of a sugar chain in which 1-position of fucose is bound to 6-position of N-acetylglucosamine in the reducing end through α -bond in a complex type N-glycoside-linked sugar chain is deleted, and wherein the cell is naturalized in a serum-free medium.

4. **(Currently Amended)** The cell according to ~~any one of claims 1 to 3,~~
wherein the enzyme relating to modification of a sugar chain in which 1-position of
fucose is bound to 6-position of N-acetylglucosamine in the reducing end through α -
bond in a complex type N-glycoside-linked sugar chain is α -1,6-fucosyltransferase.

5. **(Original)** The cell according to claim 4, wherein the α -1,6-
fucosyltransferase is a protein encoded by a DNA selected from the following (a) or (b):
(a) a DNA comprising the nucleotide sequence represented by SEQ ID NO:1;
(b) a DNA which hybridizes with a DNA consisting of the nucleotide sequence
represented by SEQ ID NO:1 under stringent conditions and encodes a protein having
 α -1,6-fucosyltransferase activity.

6. **(Original)** The cell according to claim 4, wherein the α -1,6-
fucosyltransferase is a protein selected from the group consisting of the following (a),
(b) and (c):
(a) a protein comprising the amino acid sequence represented by SEQ ID NO:5;
(b) a protein consisting of an amino acid sequence in which one or more amino
acid(s) is/are deleted, substituted, inserted and/or added in the amino acid sequence
represented by SEQ ID NO:5 and having α -1,6-fucosyltransferase activity;

(c) a protein consisting of an amino acid sequence which has at least 80% amino acid sequence homology to the amino acid sequence represented by SEQ ID NO:5 and having α -1,6-fucosyltransferase activity.

7. **(Currently Amended)** The cell according to ~~any one of claims 1 to 6~~, which is resistant to a lectin which recognizes a sugar chain structure in which 1-position of fucose is bound to 6-position of N-acetylglucosamine in the reducing end through α -bond in a complex type N-glycoside-linked sugar chain.

8. **(Original)** The cell according to claim 7, wherein said resistance is resistance in which the cell survives at a higher ratio than a cell in which the genomic gene has not been knocked out when the cells are cultured in a medium containing the lectin which recognizes a sugar chain structure in which 1-position of fucose is bound to 6-position of N-acetylglucosamine in the reducing end through α -bond in a complex type N-glycoside-linked sugar chain.

9. **(Currently Amended)** The cell according to ~~any one of claims 1 to 7~~, wherein the serum-free medium is a protein-free medium.

10. **(Currently Amended)** The cell according to ~~any one of claims 1 to 9~~, which comprises a gene encoding a glycoprotein.

11. **(Original)** The cell according to claim 10, wherein the glycoprotein is a glycoprotein having no sugar chain structure in which 1-position of fucose is bound to 6-position of N-acetylglucosamine in the reducing end through α -bond in a complex type N-glycoside-linked sugar chain.

12. **(Currently Amended)** The cell according to claim 10 ~~or 11~~, wherein the glycoprotein is an antibody.

13. **(Original)** The cell according to claim 12, wherein the antibody belongs to an IgG class.

14. **(Currently Amended)** A process for producing a glycoprotein composition, which comprises using the cell according to ~~any one of claims 1 to 13~~.

15. **(Currently Amended)** A process for producing a glycoprotein composition, which comprises culturing the cell according to ~~any one of claims 1 to 13~~ in a medium to form and accumulate the glycoprotein composition in the culture, and recovering and purifying the glycoprotein composition from the culture.

16. **(Original)** The process for producing a glycoprotein composition according to claim 14 or 15, wherein the process is carried out by batch culture, fed-batch culture or perfusion culture.

17. **(Currently Amended)** The process according to ~~any one of claims 14 or 15 to 16~~, wherein at least one selected from a nutrient factor and a physiologically active substance is added to the medium during culturing.

18. **(Original)** The process according to claim 17, wherein the nutrient factor is at least one selected from a glucose, an amino acid and a vitamin.

19. **(Original)** The process according to claim 17, wherein the physiologically active substance is at least one selected from an insulin, an insulin-like growth factor, transferrin and albumin.

20. **(Currently Amended)** The process according to ~~any one of claims 14 or 15 to 16~~, wherein the glycoprotein composition is an antibody composition.

21. **(Original)** A method for naturalizing a cell in which a genomic gene encoding an enzyme relating to a sugar chain modification in which 1-position of fucose is bound to 6-position of N-acetylglucosamine in the reducing end through α -bond in a complex type N-glycoside-linked sugar chain is knocked out in a serum-free medium, which comprises inoculating the cell into a medium for naturalization to give a cell density of 1×10^5 to 1×10^6 cells/ml.

22. **(Original)** A method for obtaining a clone in which a genomic gene encoding an enzyme relating to a sugar chain modification in which 1-position of fucose is bound to 6-position of N-acetylglucosamine in the reducing end through α -bond in a complex type N-glycoside-linked sugar chain is knocked out, which comprises naturalizing the cell in a serum-free medium by the method according to claim 21, and then cloning the cell.

23. **(Original)** A cell in which a genomic gene encoding an enzyme relating to a sugar chain modification in which 1-position of fucose is bound to 6-position of N-acetylglucosamine in the reducing end through α -bond in a complex type N-glycoside-linked sugar chain is knocked out, wherein the cell is naturalized in a serum-free medium, which is obtainable by the method according to claim 21.

24. **(Original)** A clone in which a genomic gene encoding an enzyme relating to a sugar chain modification in which 1-position of fucose is bound to 6-position of N-acetylglucosamine in the reducing end through α -bond in a complex type N-glycoside-linked sugar chain is knocked out, wherein the clone is naturalized in a serum-free medium, which is obtainable by the method according to claim 22.

25. **(Original)** The method according to claim 21 or 22, wherein the serum-free medium is a protein-free medium,

26. **(Original)** The cell according to claim 23, wherein the serum-free medium is a protein-free medium.

27. **(Original)** The clone according to claim 24, wherein the serum-free medium is a protein-free medium.